IDEE GROUP

EXPLORE. ENVISAGE. EXECUTE

IT PROJECT MANAGEMENT

ALEX MARZELLA – DIRECTOR IDEE GROUP
PROJECT DELIVERY METHODOLOGIES

Agenda

- **Introductions**
- **Purpose of methodologies**
- **Types of methodologies**
- **Agile**
- **Delivery model**

Q & A

Who are we

From strategy to delivery, IDEE Group shapes the way our clients deliver change through proven leading edge and best practice project management delivery practices. We design, implement and manage projects, programmes and PMO's, or improve your ability to run them better.

IDEE Group combine deep project delivery and PMO implementation experience with a fact-based and disciplined approach in everything we do. We deliver highly effective strategic solutions to our clients by leveraging our expertise though our thinking and approach to explore, envisage and execute.

1993   **2001**   **2013**   **2015**   **2017**

My career

Portfolio Head New Businesses & Chief Technology Office

IT'S HOW WE CONNECT

Director

IDEE GROUP.

Business Portfolio Manager

AXA

Head of Project Management Office

coles

Construction Engineer / Project Manager

BAULDERSTONE HORNIBROOK

salini COSTRUTTORI

TRANSFIELD

MBA

B. Eng (Civil)

Project Delivery Methodologies
Alex Marzella, Director

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Delivering change is difficult

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"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things."

— Niccolo Machiavelli
The Prince (1532)

Purpose of Methodologies

1. **Reduce execution risk**
    - Limited resources (people and $$$)
    - Executives want certainty

2. **Improve time to value**
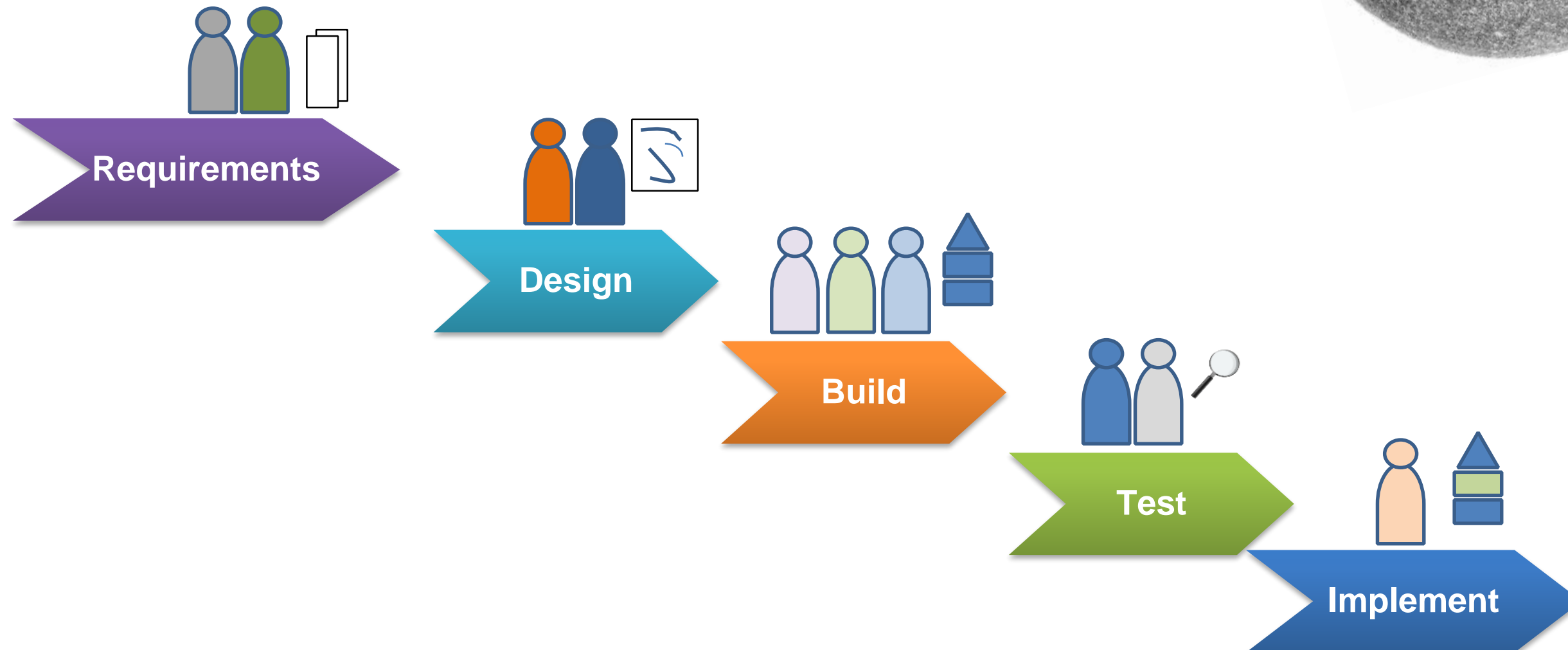   - Limited resources (people and $$$)
    - Executives want certainty

Types of software development lifecycles used

Waterfall

Requirements, design, build, test and deploy at the end
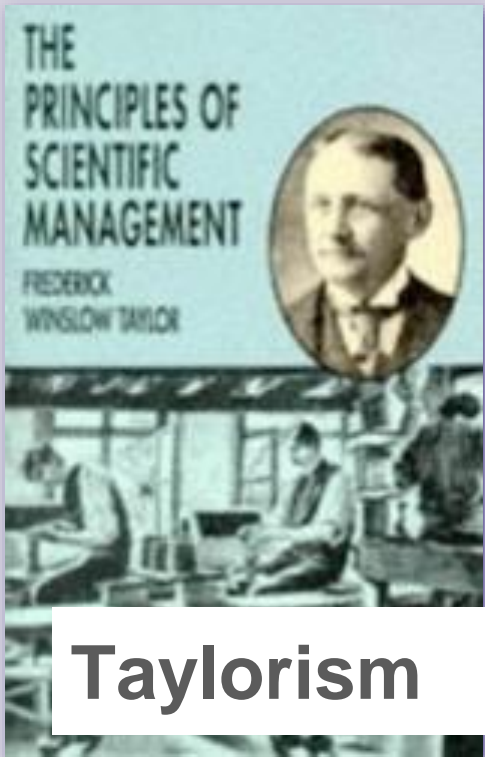
Software Development Life Cycle

Sequential

Requirements

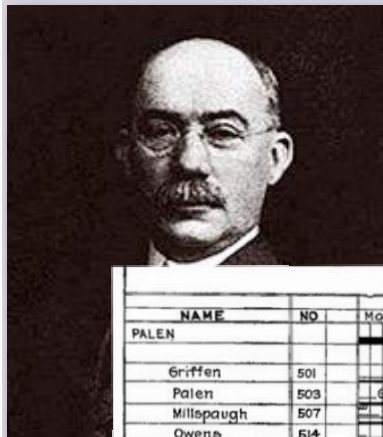Design

Build

Test

Implement

The Challenge…

GROUP.

WE COST TOO MUCH,
TAKE TOO LONG,
WE DON'T KNOW
IF WE ARE BUILDING THE RIGHT THING FOR
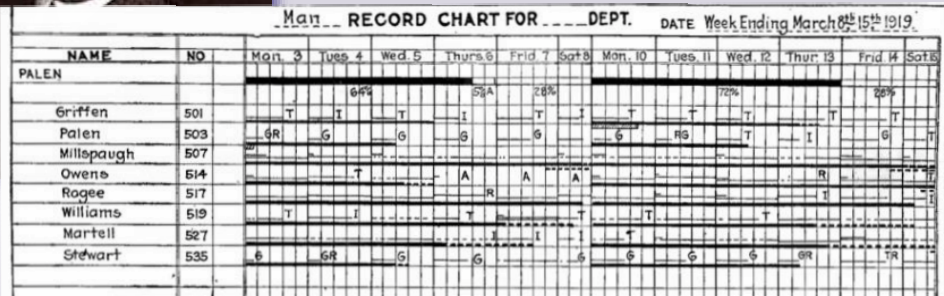OUR CUSTOMERS, OR KNOW WHAT VALUE WE
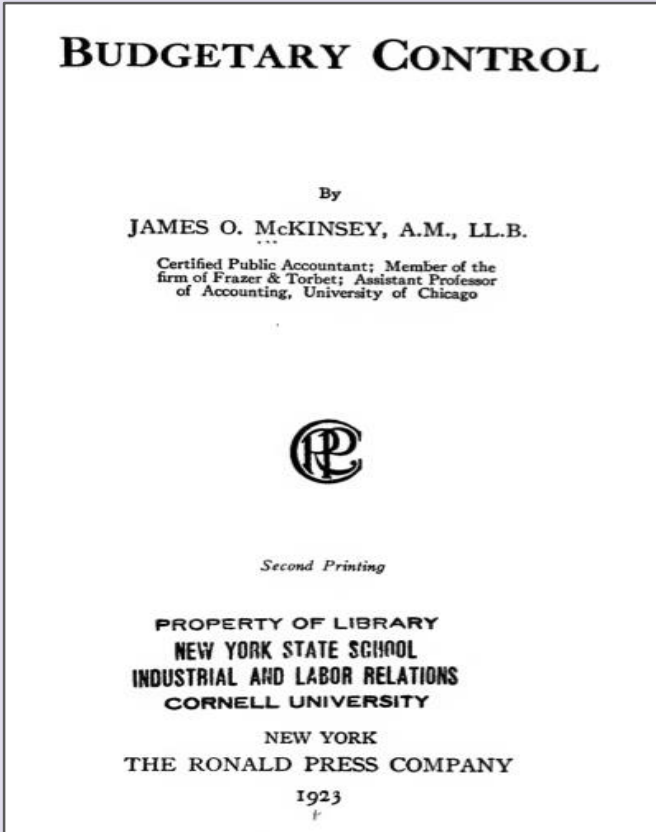PRODUCE.

Thinking built from industrial age

Taylorism

Gantt

Budgeting

BUDGETARY CONTROL

By
JAMES O. McKINSEY, A.M., LL.B.

Certified Public Accountant; Member of the
firm of Frazer & Torbet; Assistant Professor
of Accounting, University of Chicago

Second Printing

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NEW YORK STATE SCHOOL
INDUSTRIAL AND LABOR RELATIONS
CORNELL UNIVERSITY

NEW YORK
THE RONALD PRESS COMPANY
1923

Widget engineering

"Draw it up, and build it like you drew it"

Order-taker mentality

"You build, what we tell you to build"

Maximize utilization

"The more we start, the more we finish"

Control through milestones and reports

"If we still can't tell where we are we will just ask for more detailed data"

We can plan a full year of projects in advance

"If we only planned in more detail, we could really get it right this year."

Just get it done

"This is the plan we agreed to; now execute it"

The basis for our traditional thinking and process is 'standardisation' of output with minimised risk and controlled cost and timeframe ... not time to value and innovation

The Challenge…

The world is moving at a phenomenal pace!
The more technology offers – the more we want!
Nothing is standing still – blink and you'll miss it!

In today's environment companies must have the ability to identify shifts in trends and demand, and respond to these shifts quickly

Types of software development lifecycles used - Agile

Design, build, test and deploy incrementally
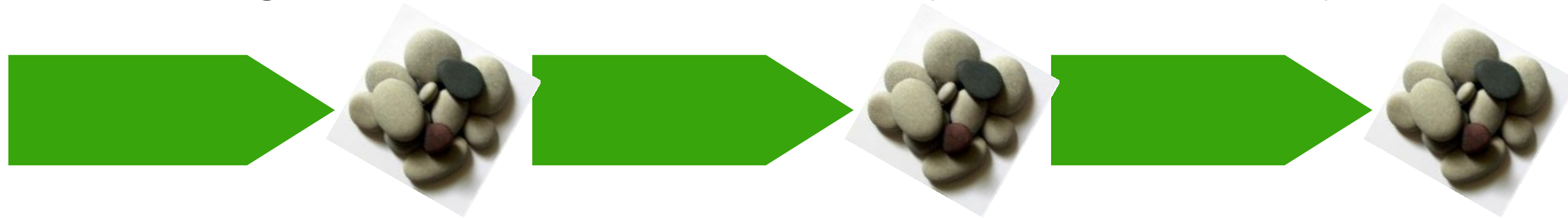
Agile works by breaking the project down into little bits of user functionality called user stories, prioritising them, and then continuously delivering them in short cycles called iterations.

For the right initiatives an Agile approach de-risks project delivery, and accelerates the time to value.

The Case for Change

A waterfall-based project only delivers value at the end, while agile approaches can deliver value more progressively:
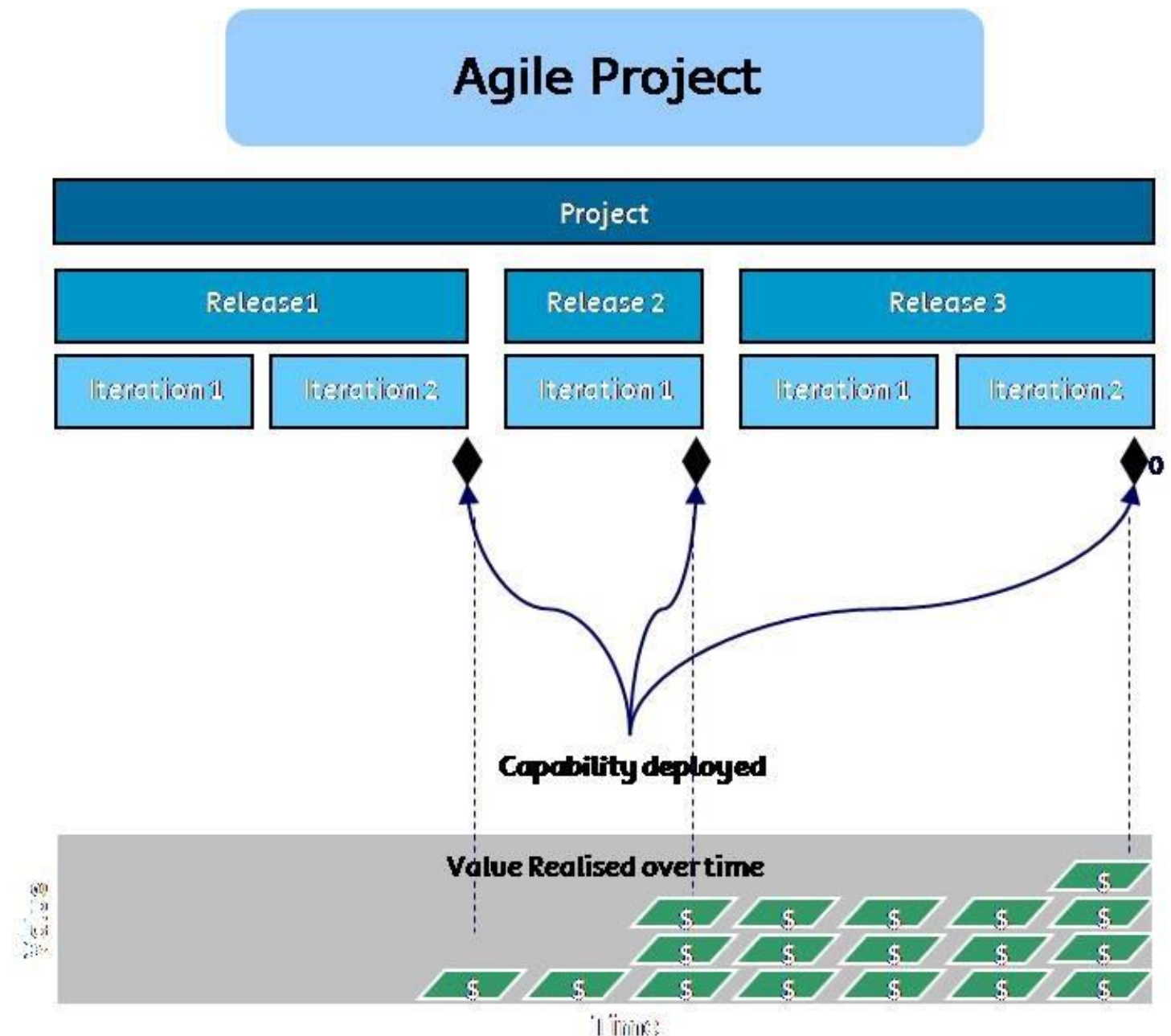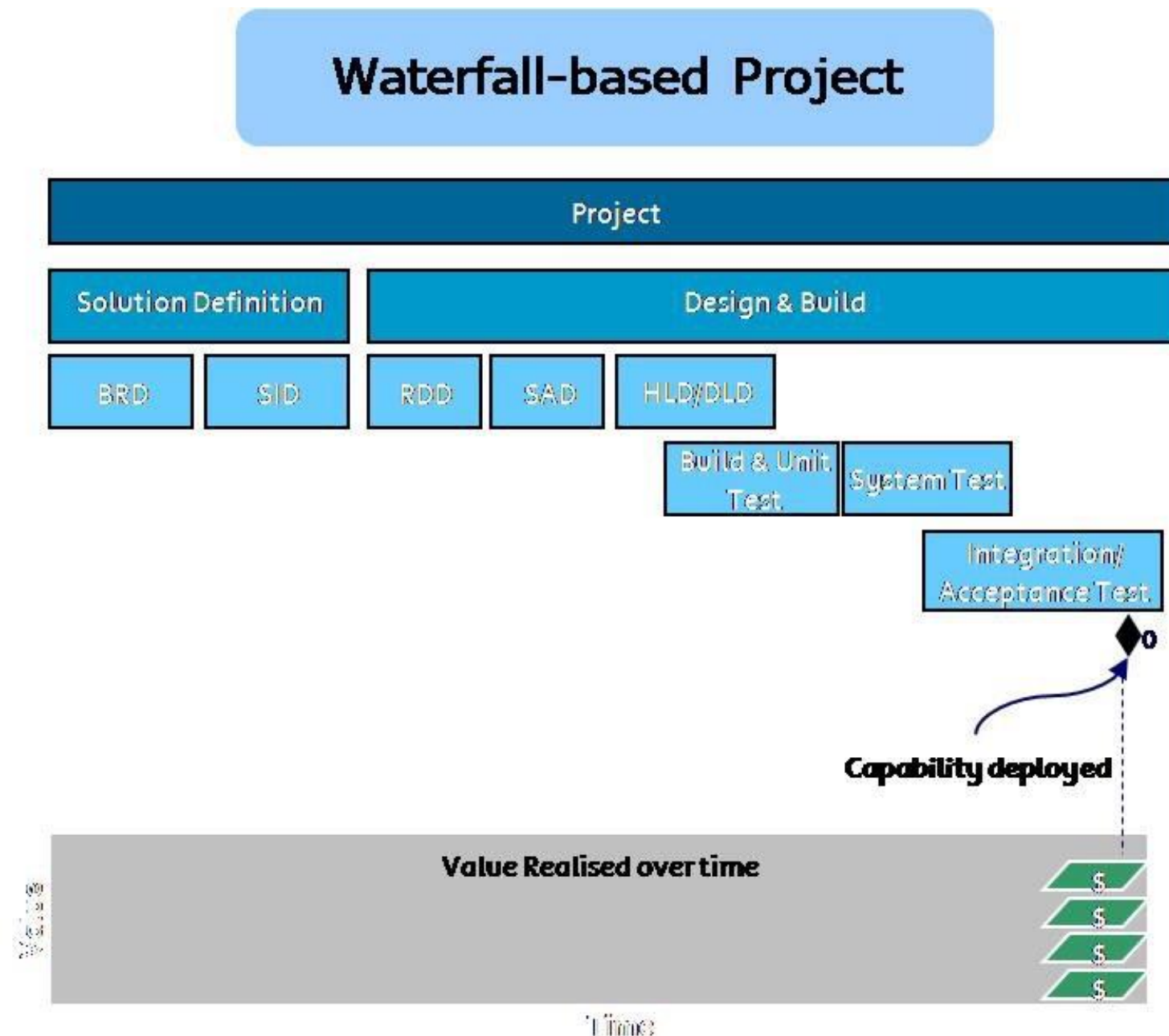
What is agile?
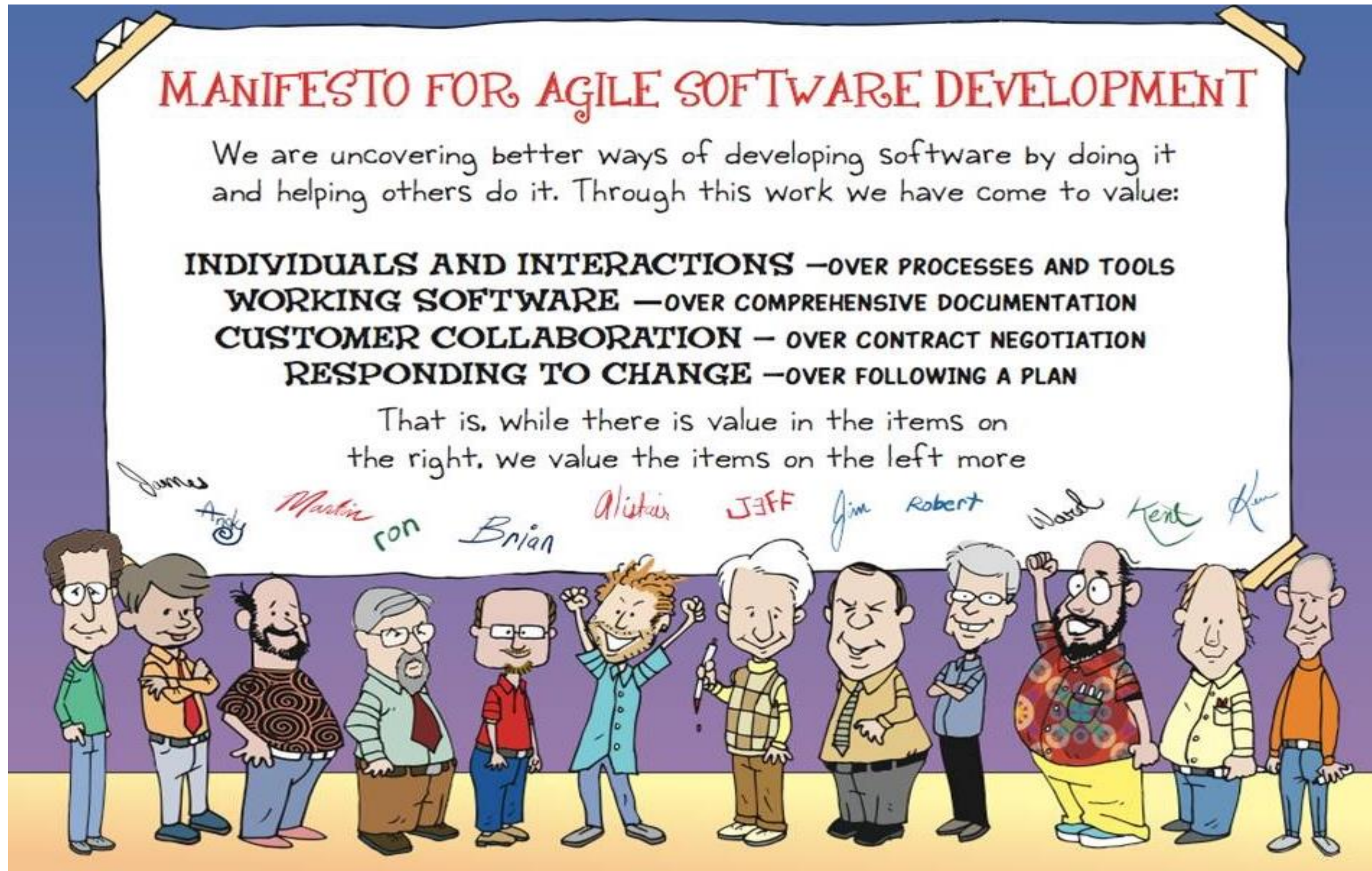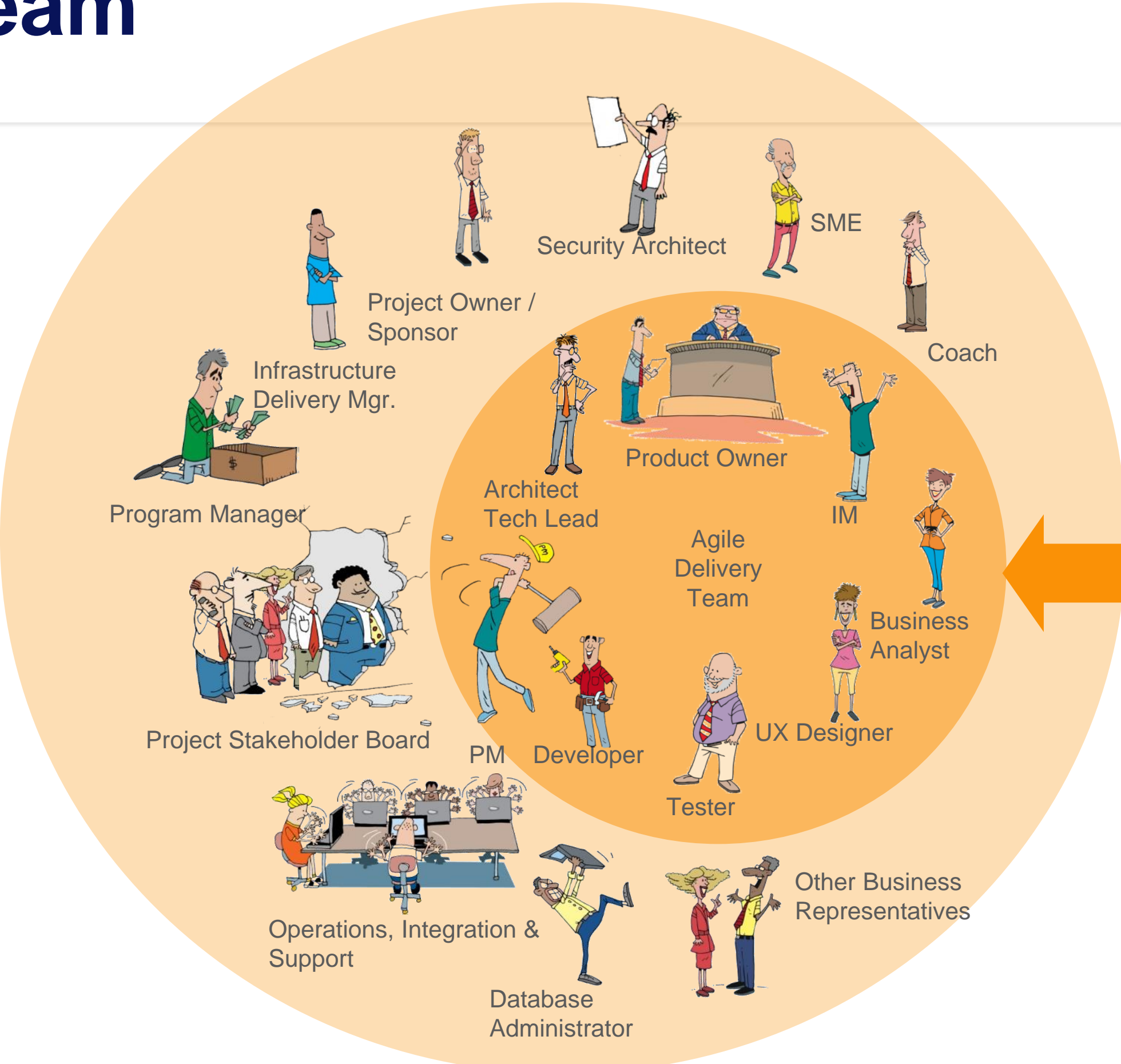
The Agile Team

BASIC AGILE PRACTICES

Understanding Business value and getting started
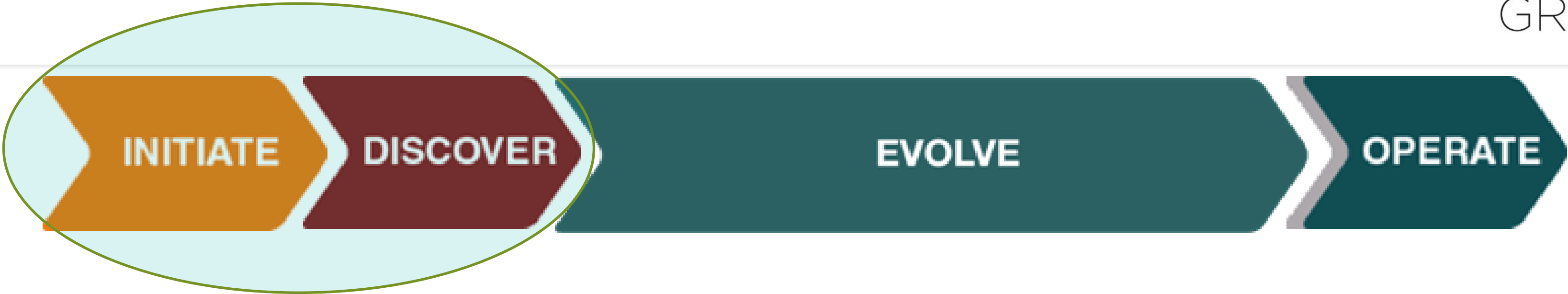
The Initiate and Discover phases of agile allow a common understanding of the business value across the delivery team

The Agile Planning

Iteration

Release

Future Releases

Priority oriented planning and development

High

Priority

Value

Cost

Risk

Knowledge

Low
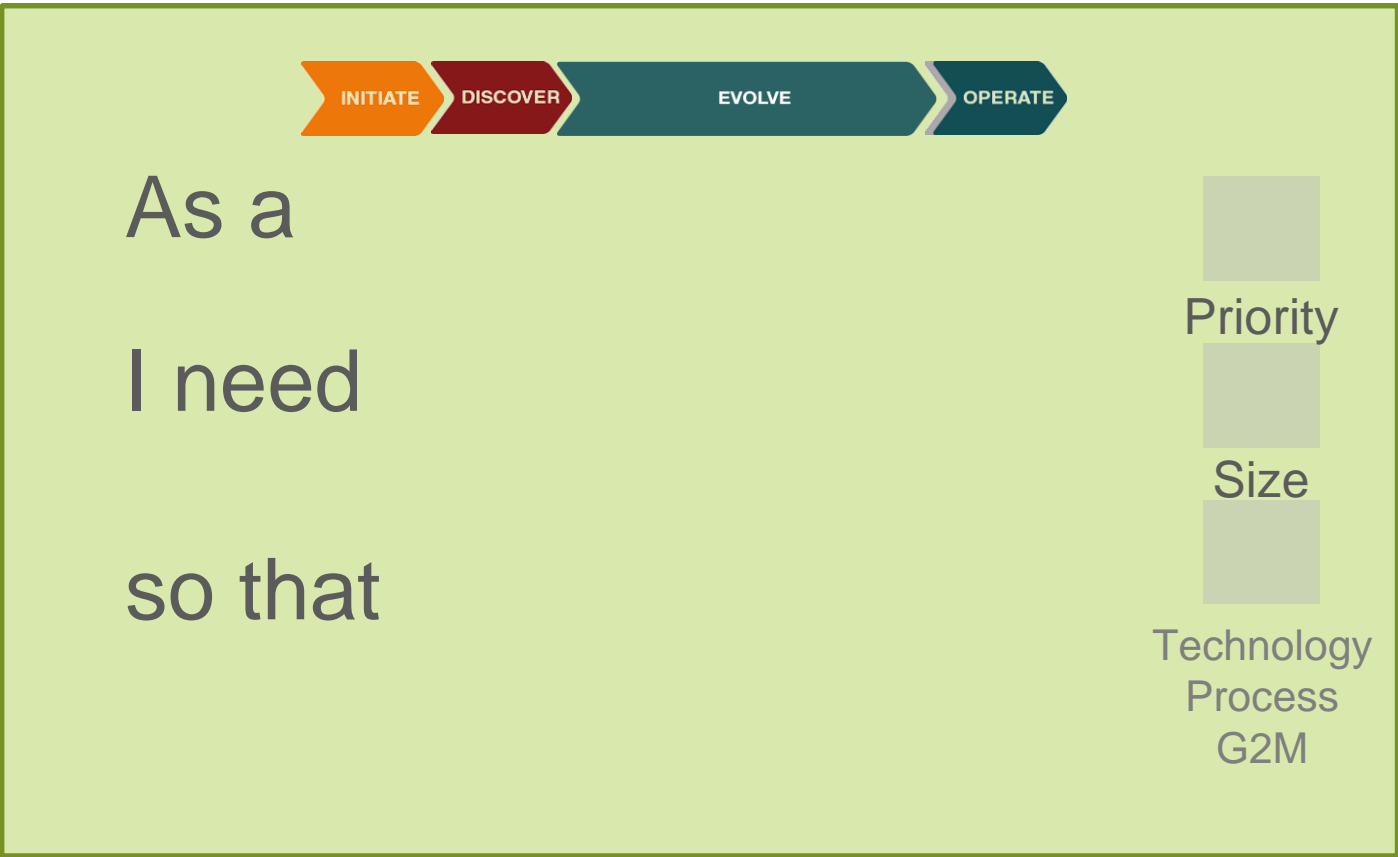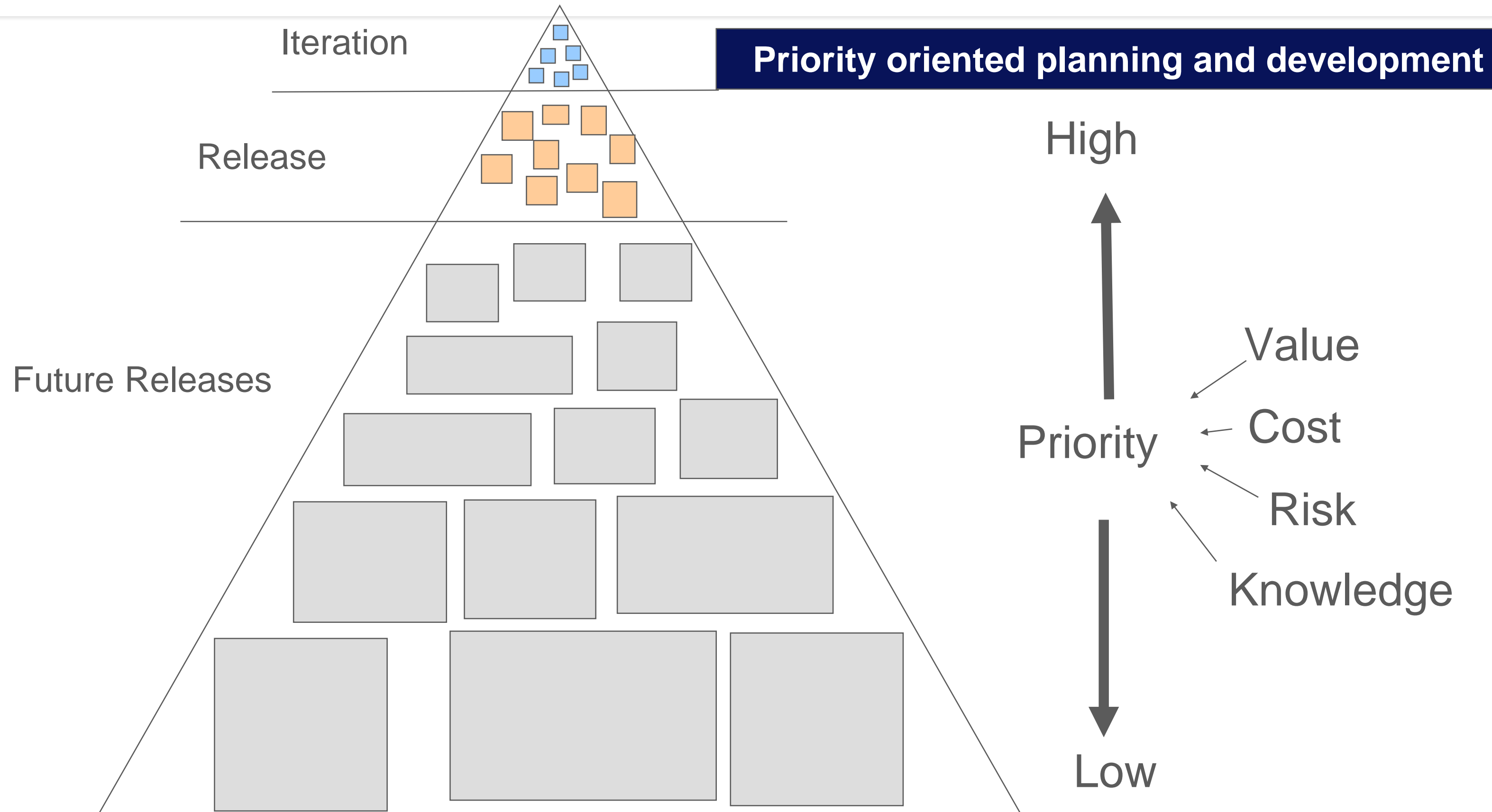
Retrospectives

Retrospectives are regular reviews of the team, by the team, to discuss how they are working
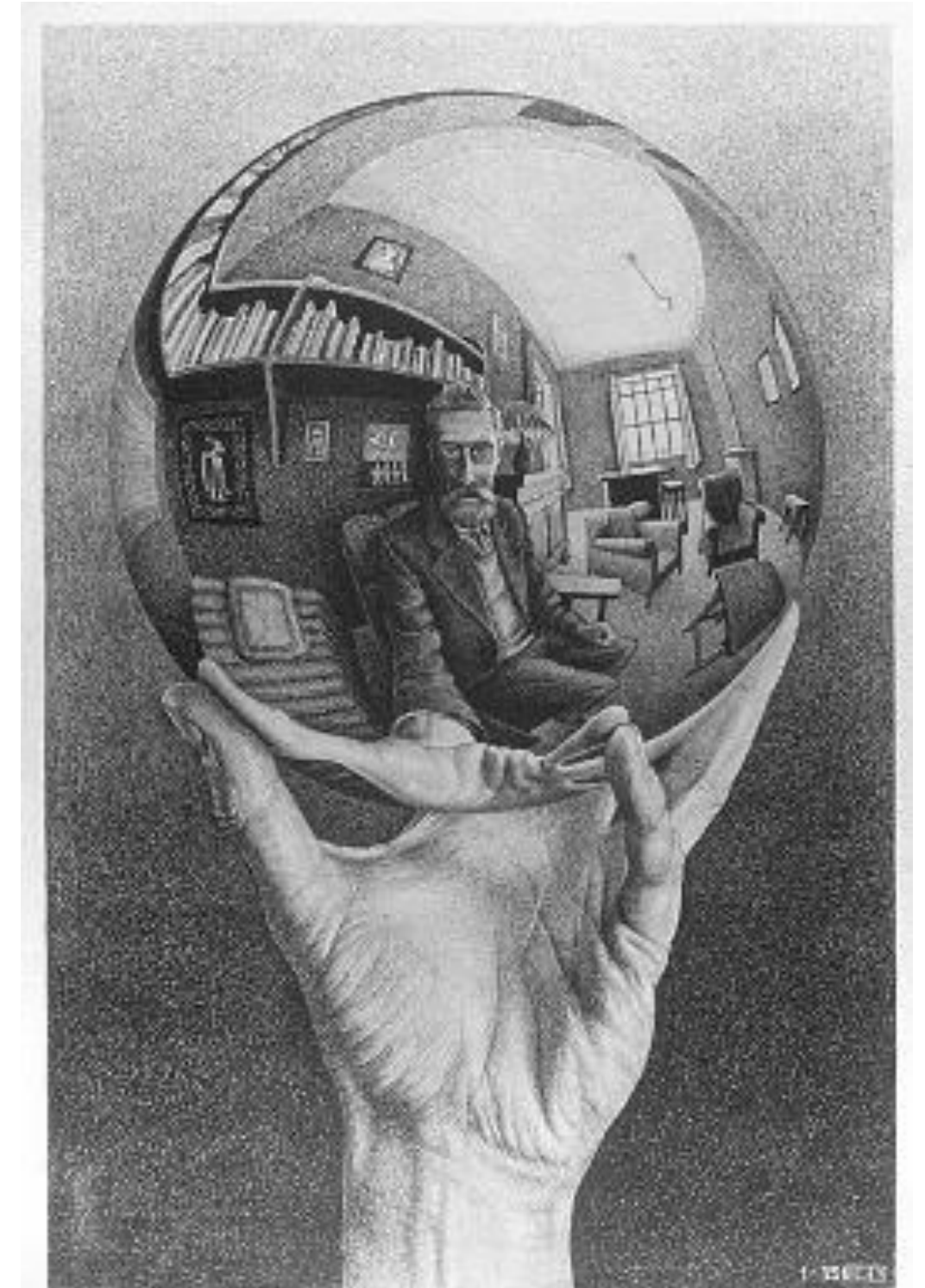
Daily Stand up

Showcases

Agile

User Stories

User stories are part of an agile approach that helps shift the focus from writing about requirements to talking about them.
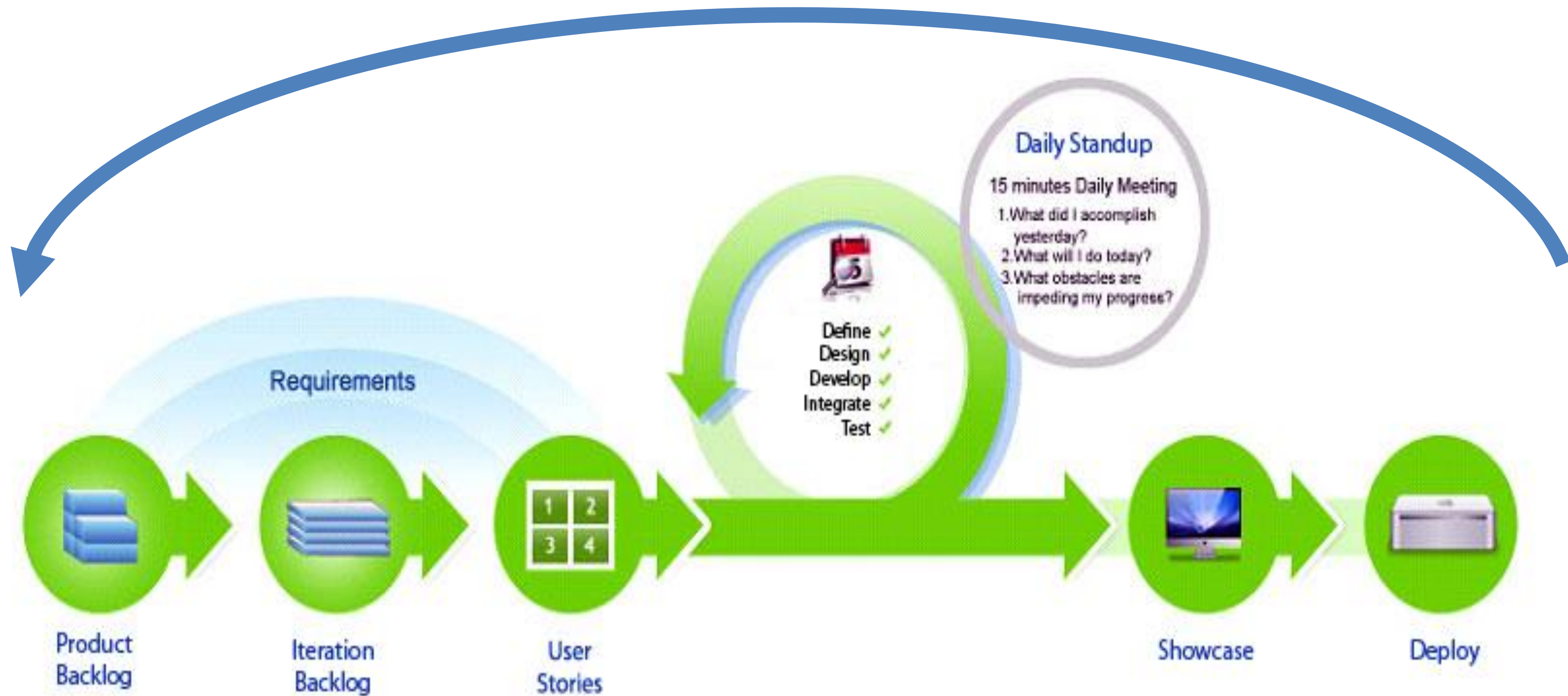
STORY

As a <User>

I want to <do something>

So That <I get some benefit>

Story
#01   Search for flights

As a holiday traveller

I want to be able to search for available flights on the date and for the destination I want to travel to

So that I can choose the flight that best suits my holiday plans

A good Story should be:

- Independent?

- Able to be estimated?

- Small enough to be completed within an iteration?

- Testable?

Why include the user?

Story Discovery
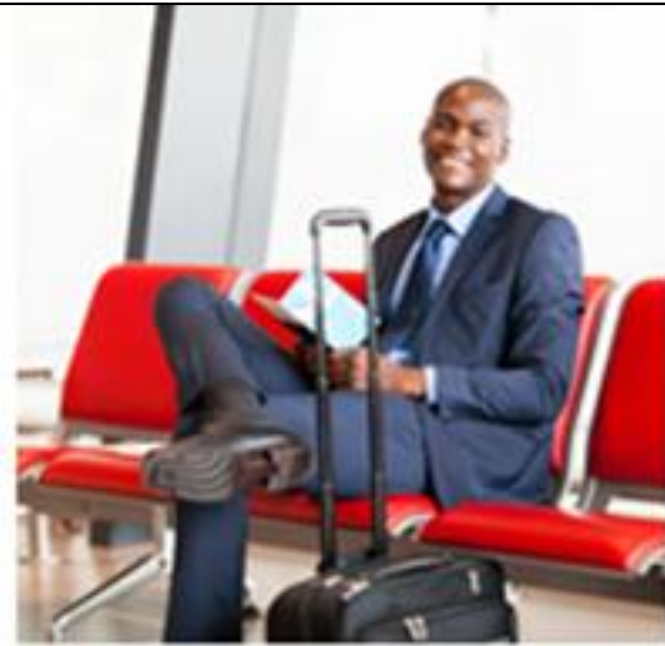
Jeff – the Frequent Traveller

- **Personas**
- **Story Development**
- **Story Prioritisation**

Story
#01   Search for flights

As a holiday traveller

I want to be able to search for available flights on the date and for the destination I want to travel to

So that I can choose the flight that best suits my holiday plans

Story Discovery – Personas

Personas help us to understand who our users are
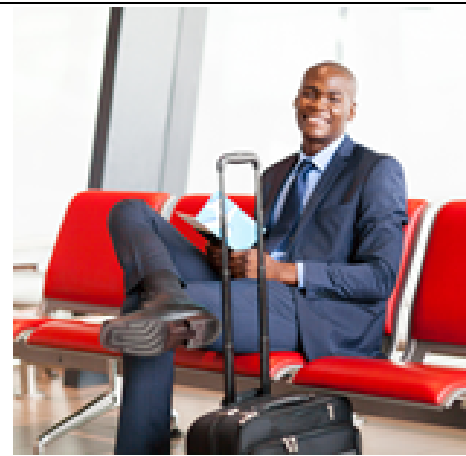
Jeff – the Frequent Traveller

He has a job that requires him to travel a lot between the companies worldwide offices.

He wants to have complete control over booking flights, hotels and rental cars in one online tool so that he can make all of his bookings quickly and easily.

The last think he wants is to spend a lot of time making travel plans and because he usually travels to and from the same cities, he would like to be able to save regular travel criteria as favourites that he can recall to speed up the booking process.
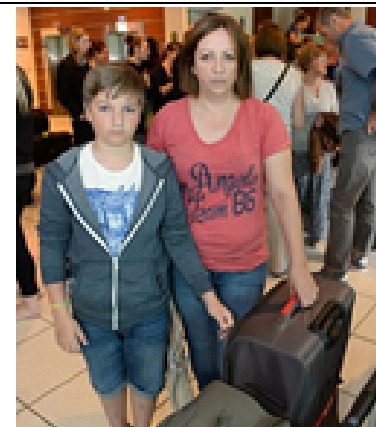
Susan – the Holiday Maker

Susan plans a summer holiday for her family each year.

She always tries to get the best value for money by finding the cheapest flights available.

Because she is travelling with her children, she would like to be able to choose seats at the time of booking so that the family is able to sit together.

As one of her children has special needs, she would also like to be able to easily include special access and dietary requirements at the time of booking.

Activity – Personas

We are developing new services to include Travel.

We need to develop an Online Accommodation booking tool

to support this new Business initiative.

With the person next to you write think of another persona for our new web site and write a description.

10
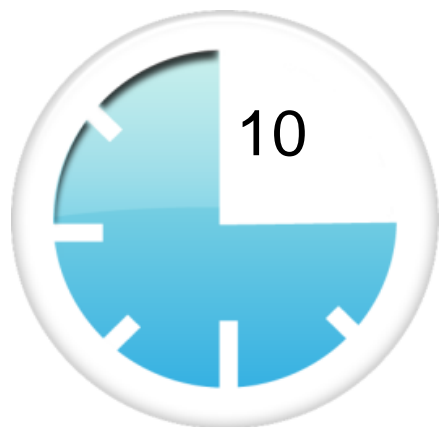
Examples from the room?

Activity – User Stories

With the person next to you write three user stores for a new online accommodation booking web site

10
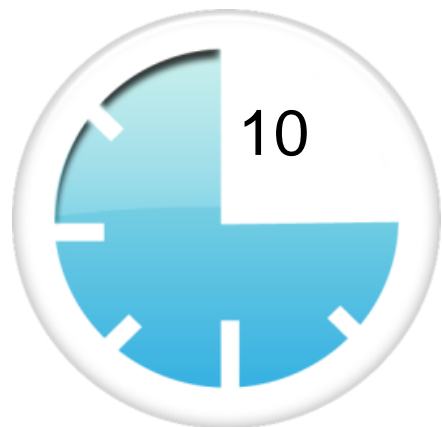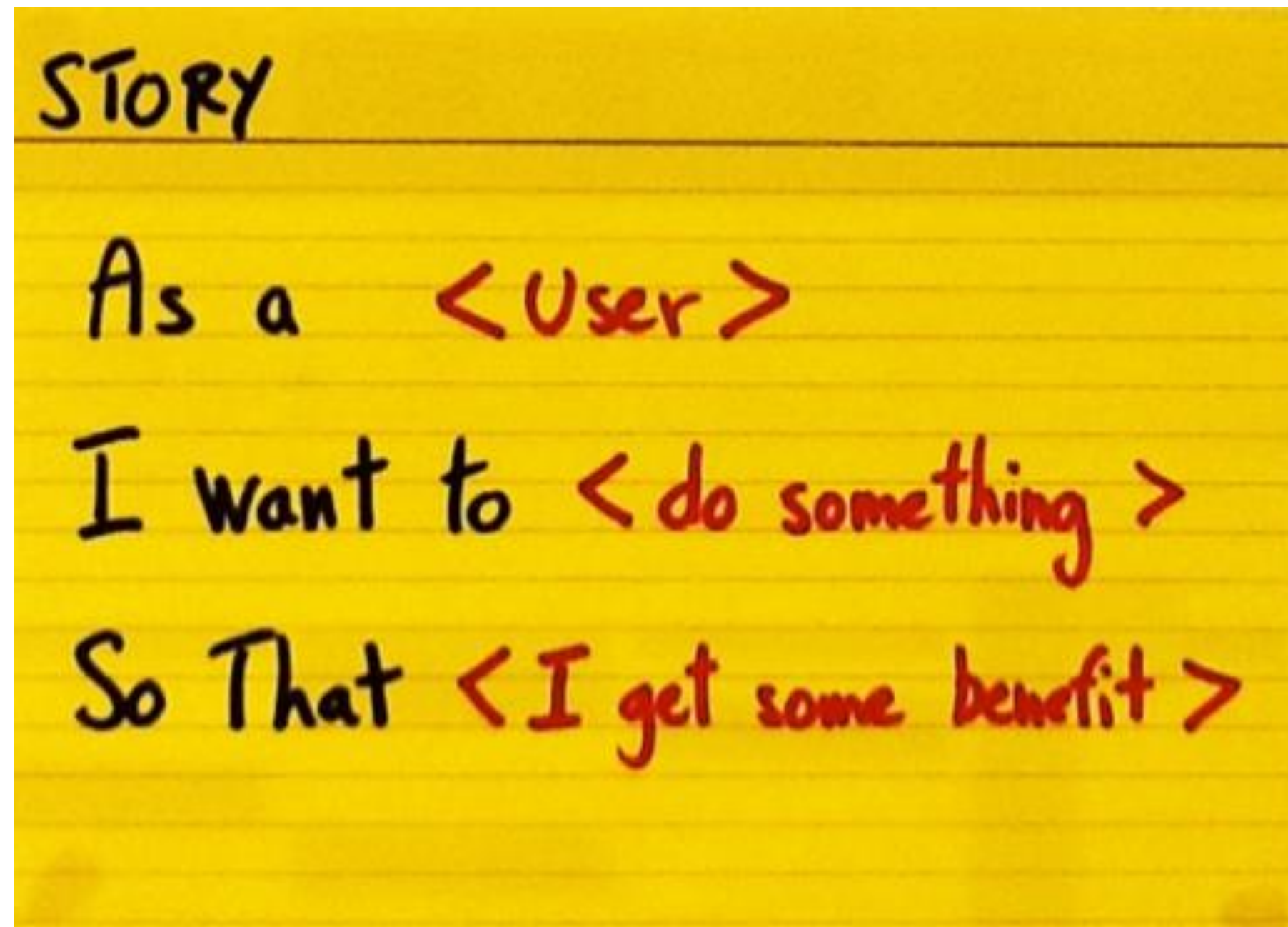
Examples from the room?

Story Discovery – Story Prioritisation

Once we've identified a number of stories, we have a Product Backlog
All items in the product backlog need to be prioritised

Must have – a requirement that has to be present in the final solution for it to be a success

Should have – a requirement has a high priority but can be substituted by another means if absolutely necessary

Could have – a requirement that is seen as nice to have if time and budget permit and all "Musts" and "Shoulds" have been delivered

Won't have – a requirement that would be nice to have if at all possible and all other criteria have been fulfilled, or is a requirement for the future

Customer Journeys Maps

Release plan based on value prioritisation

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Release 1 | Release 2 →

Iteration 1

Story #01	
	1

Story #02	
	4

Story #03	
	2

Story #04	
	2

Story #05	
	1

Story #06	
	8

Iteration 2

Story #07	
	8

Story #08	
	8

Iteration 3

Story #09	
	4

Story #10	
	8

Story #11	
	4

Iteration 4

Story #12	
	1

Story #13	
	8

Story #14	
	8

Story #15	
	1

Iteration 5

Story #16	
	2

Story #17	
	4

Story #18	
	2

Story #19	
	1

Story #20	
	4

Story #21	
	2

Story #22	
	2

Story #23	
	1

#01 **Feature**
Search for flight availability

#02 **Feature**
Make a booking

#03 **Feature**
Process payment

#04 **Feature**
Print ticket

#05 **Feature**
Store customer details

Kanban Wall

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Release →

Iteration 1

Story #01	1
Story #02	4
Story #03	2
Story #04	2
Story #05	1
Story #06	8

#01 Feature
Search for flight availability

A Kanban Wall is a visual representation of the work being undertaken by the team

In the daily stand-up each team member updates the progress of their tasks by moving cards assigned to them along the wall

To Do *(Iteration Backlog)*	In Progress	Done
Story #04 — 2	Story #02 JM — 4 Story #03 TS — 2	Story #01 JM — 1
Story #05 — 1 Story #06 — 8		

To Do *(Iteration Backlog)*	Analysis		Development		**Testing** *(Iteration Backlog)*		Deploy
	Doing	Done	Doing	Done	Doing	Done	
Story #05 — 1	Story #04 TS — 2		Story #03 JM — 2		Story #01 AV — 1		
Story #06 — 8				Story #02 JM — 4			
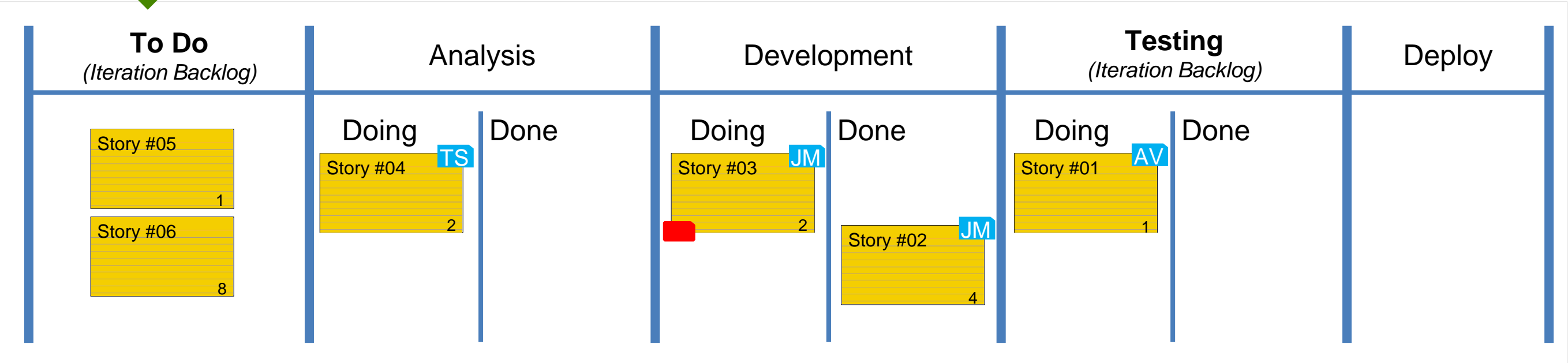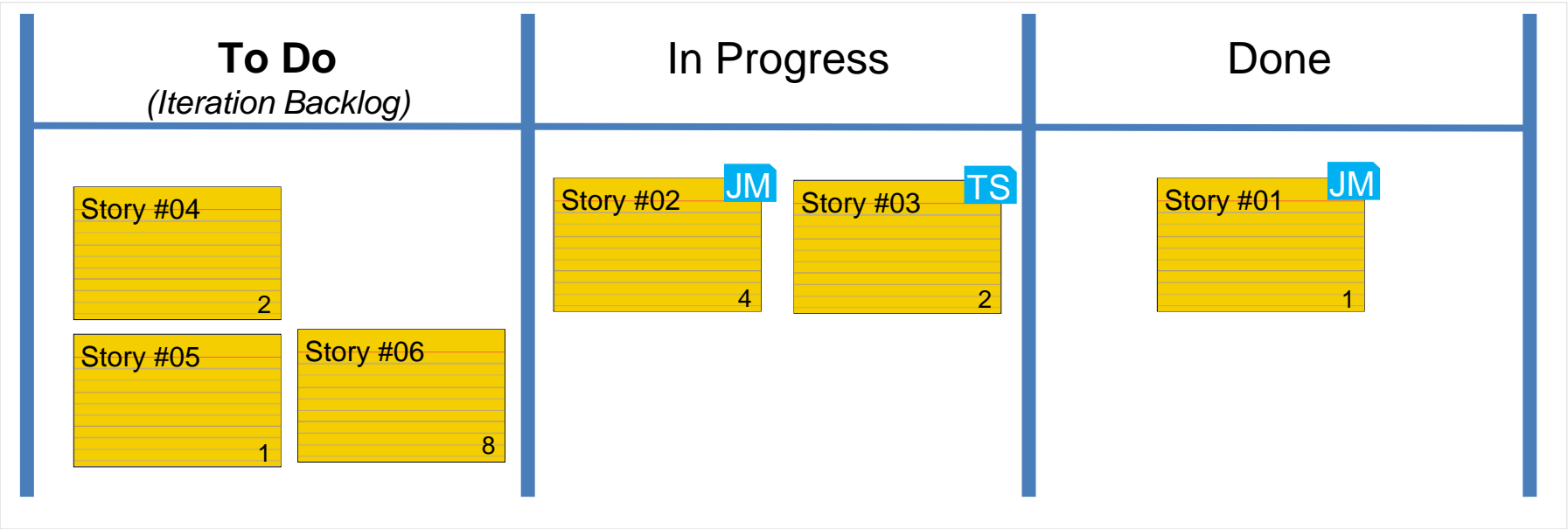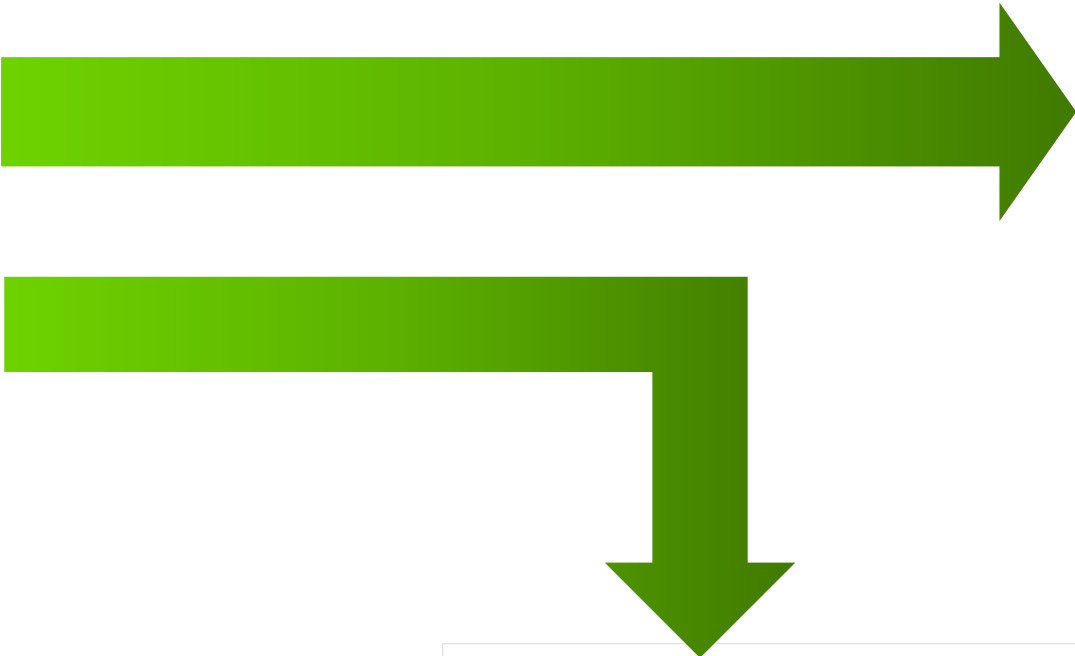
Kanban Wall

You've been asked to run your first Agile Project, starting tomorrow!

What's the first concern you would have when you kick off your first Agile Project?

What would you like to ask an Agile Guru if you had 10 minutes of their time?

10
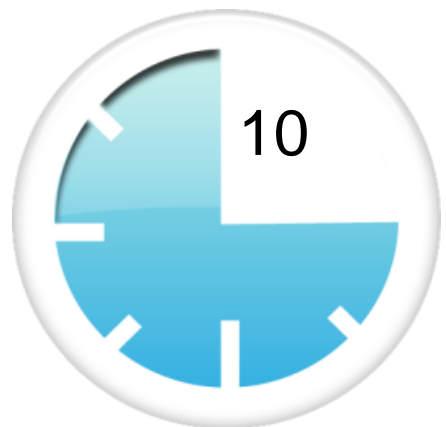
Methodologies

Delivery Lifecycle – Waterfall

INITIATE — *Get this project APPROVED*
- Discovery
- Estimation
- Approval

PLAN — *Get this project STARTED*
- Mobilise
- Requirements
- Design

EXECUTE — *Get this project DELIVERED*
- Build
- Test
- Implement

CLOSE — *Get this project CLOSED*
- Wrap-up

Delivery Lifecycle – Agile

INITIATE
- Initiate

PLAN
- Inception

EXECUTE
- Design
- Build
- Test
- Deploy

CLOSE
- Wrap-up

The Waterfall Model

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INITIATE

- ✓ Initiate Discussions
- ✓ Conduct Discovery
- ✓ Outline the Solution
- ✓ Allocate a PM
- ✓ High Level Project Timeline & Budget

PLAN
Mobile, Requirements, Design

- ✓ Engage Stakeholders
- ✓ Mobilise the Team
- ✓ Kick-off Project
- ✓ Setup Project Governance
- ✓ Document Requirements
- ✓ Initiate Documentation
  - ✓ Detailed Design & Architecture
  - ✓ Project Schedule
  - ✓ Risk, Issue, Change Registers
  - ✓ Quality Assessment Plan
  - ✓ Communications Plan
- ✓ Refine Project Timeline & Budget
- ✓ Finalise Business Case

EXECUTE
Build, Test and Implement

- ✓ Build
- ✓ Test
  - ✓ Unit
  - ✓ Integration
  - ✓ System
  - ✓ User Acceptance
- ✓ Implement
- ✓ Handover to Business Support

CLOSE
Wrap-up

- ✓ PIR
- ✓ Lessons Learned
- ✓ Project Closure

The Agile Model

There are a few different agile methodologies, although Agile is really more of a philosophy than a methodology…

Lean/Kanban

focuses on cutting out as much as possible
and retaining only the bare minimum process

DSDM

Dynamic Systems Development Method
an early iterative method, mainly used in the UK

Scrum

probably the most popular globally
focuses on agile management and how to better organise teams

Others – Less Common

Crystal
Feature Driven Development
Enterprise Agile (or XBreed)
Agile Unified Process

XP

Extreme Programming
includes some management elements
but emphasises technical practices so is more of an engineering methodology

The Agile Model

INITIATE	PLAN	EXECUTE	CLOSE
	Inception (usually < 4 weeks)	Design, Build, Test and Deploy	Wrap-up

INITIATE
- ✓ Initiate Discussions
- ✓ Find a Team
- ✓ Find a Space
- ✓ Allocate a PM
- ✓ Plan the Inception
- ✓ High Level Project Timeline & Budget

PLAN — Inception (usually < 4 weeks)
- ✓ Mobilise the Team
- ✓ Run the Inception
  - ✓ Business & Project Context
  - ✓ Story Discovery
  - ✓ Technical Vision
  - ✓ Estimation & Planning
  - ✓ RAIDS & Communications
- ✓ Decide if project is viable

EXECUTE — Design, Build, Test and Deploy
- ✓ Ongoing Iteration Planning
- ✓ Iterations
  - ✓ Analyse
  - ✓ Develop
  - ✓ Test
  - ✓ Deploy
- ✓ Stand-ups
- ✓ Showcases
- ✓ Retrospectives

CLOSE — Wrap-up
- ✓ PIR
- ✓ Lessons Learned
- ✓ Project Closure

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Methodologies & overall processes

Project Management Processes

Governance & Control *Structure and rules for successful delivery*	**Change Management** *Controlling the 'What'*	**Resource Management** *Controlling the labour*
Communication & Reporting *Information Flow to, from and within*	**Schedule Management** *Controlling the 'When'*	**Procurement Management** *Controlling the goods and services*
Risk & Issue Management *Controlling the threats to successful delivery*	**Financial Management** *Controlling the 'How much ($$$)'*	**Quality Management** *Controlling the quality of delivery*

Why is a delivery model important?

- **The size and complexity of the project portfolio requires a formalised approach**

Portfolio

- **To ensure the right projects are implemented to achieve benefits for the business**

Business Benefits

- **To ensure projects are setup for Success and governed in a managed way to control costs, time & benefits**
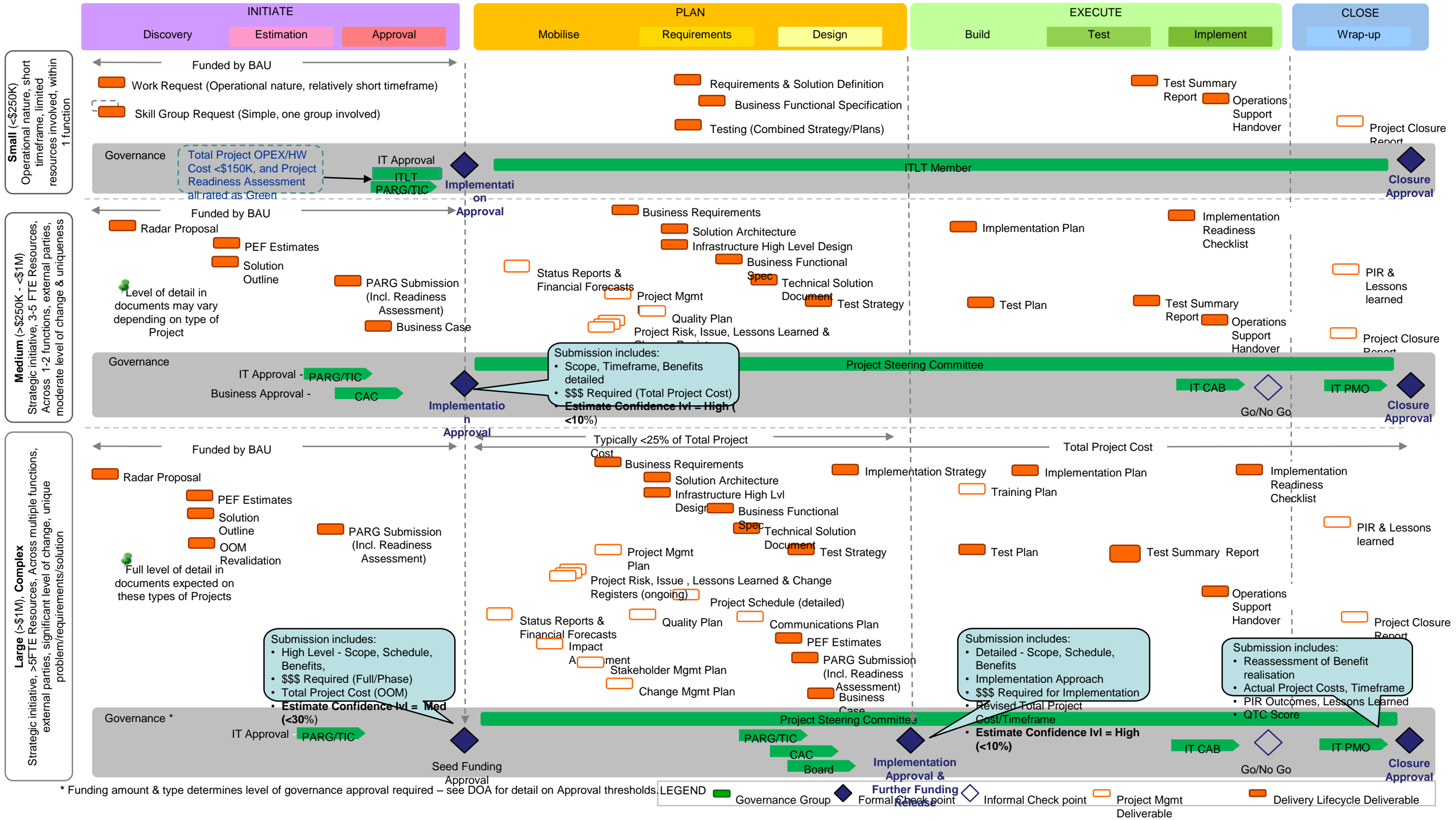
Success

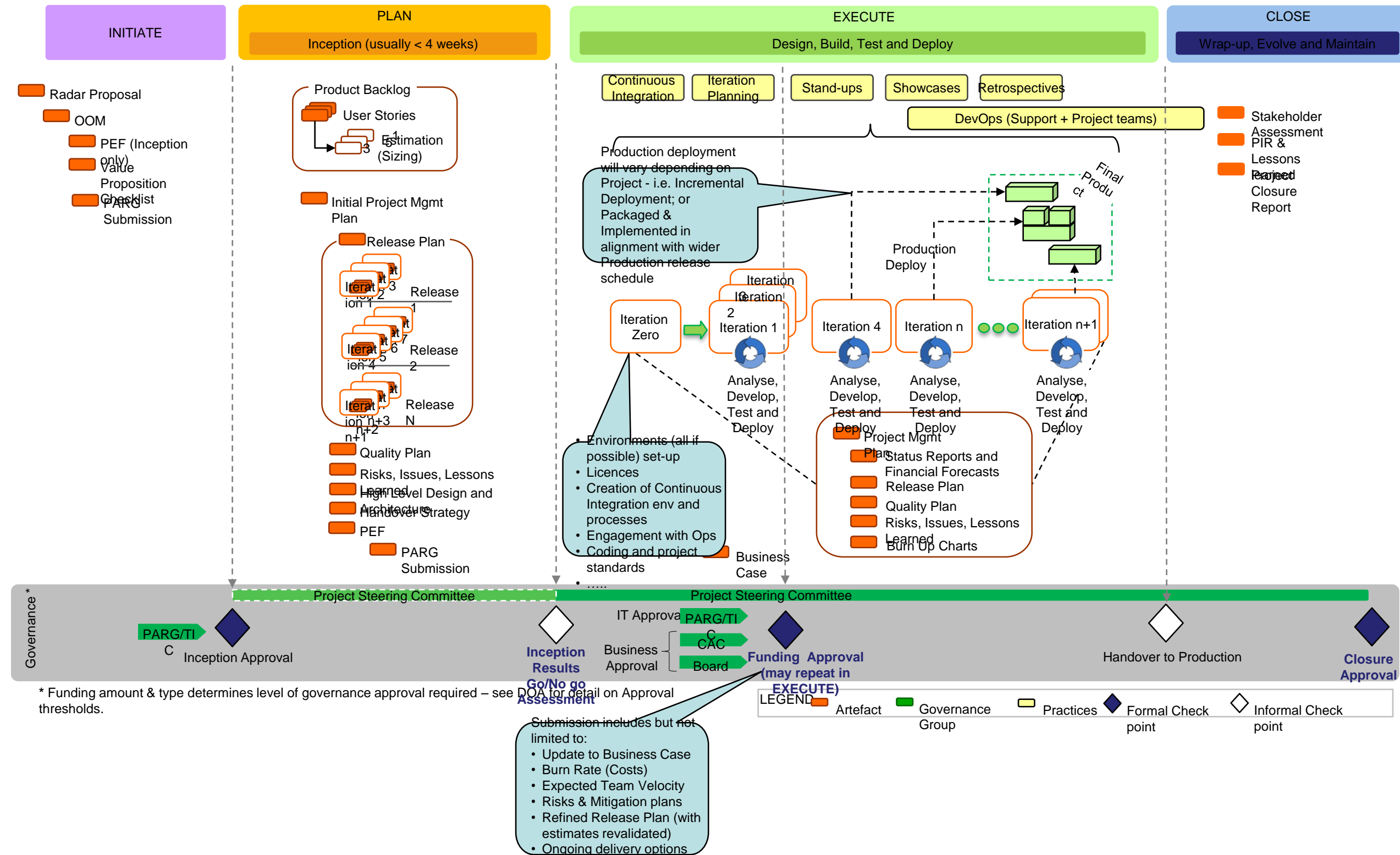- **To ensure project tasks proceed in a predictable and consistent manner**

Consistency

IT Waterfall Delivery Model

IT Agile Delivery Model

INITIATE

PLAN
Inception (usually < 4 weeks)

EXECUTE
Design, Build, Test and Deploy

CLOSE
Wrap-up, Evolve and Maintain

Radar Proposal

OOM

PEF (Inception only)

Value Proposition Checklist

PARG Submission

Product Backlog
User Stories
Estimation (Sizing)

Initial Project Mgmt Plan

Release Plan
Iteration 1
Release 1
Iteration 4
Release 2
Iteration n+3
Release N
n+1

Quality Plan

Risks, Issues, Lessons Learned

High Level Design and Architecture

Handover Strategy

PEF

PARG Submission

Continuous Integration

Iteration Planning

Stand-ups

Showcases

Retrospectives

DevOps (Support + Project teams)

Production deployment will vary depending on Project - i.e. Incremental Deployment; or Packaged & Implemented in alignment with wider Production release schedule

Final Product

Production Deploy

Iteration Zero

Iteration 2
Iteration 1

Iteration 4

Iteration n

Iteration n+1

Analyse, Develop, Test and Deploy

Analyse, Develop, Test and Deploy

Analyse, Develop, Test and Deploy

Analyse, Develop, Test and Deploy

• Environments (all if possible) set-up
• Licences
• Creation of Continuous Integration env and processes
• Engagement with Ops
• Coding and project standards
• ……

Business Case

Project Mgmt Plan
Status Reports and Financial Forecasts
Release Plan
Quality Plan
Risks, Issues, Lessons Learned
Burn Up Charts

Stakeholder Assessment
PIR & Lessons Learned
Project Closure Report

Governance *

PARG/TIC

Inception Approval

Inception Results
Go/No go Assessment

IT Approval
Business Approval

PARG/TIC
CAC
Board

Project Steering Committee

Project Steering Committee

Funding Approval (may repeat in EXECUTE)

Handover to Production

Closure Approval

* Funding amount & type determines level of governance approval required – see DOA for detail on Approval thresholds.

Submission includes but not limited to:
• Update to Business Case
• Burn Rate (Costs)
• Expected Team Velocity
• Risks & Mitigation plans
• Refined Release Plan (with estimates revalidated)
• Ongoing delivery options

LEGEND
Artefact
Governance Group
Practices
Formal Check point
Informal Check point

Q & A